Application No.: 09/497,792

Response to Office Action of 11/15/2004

Attorney Docket: SARAX-007A

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application

Listing of Claims:

1-64. (Cancelled)

65. (New) A system for measuring RF emissions radiated from an electronic device, comprising:

a first RF sensor for receiving the RF emissions radiated from the electronic device at a specified first distance and a plurality of RF ambient signals emitted from local transmission sources;

a first RF receiver in electrical communication with the first RF sensor, the first Rf receiver being operative to demodulate and digitize output of the first RF sensor;

a second RF sensor positioned away from the electronic device by a second distance large enough to receive the radiated RF emissions with a power level at least 20 dB lower than that received by the first RF sensor, so as to primarily receive the RF ambient signals;

a second RF receiver in electrical communication with the second RF sensor, the second RF receiver being operative to demodulate and digitize output of the second RF sensor, the second RF receiver being synchronized with the first RF receiver;

a signal processing system in electrical communication with the first and second RF receivers, the signal processing system being operative to determine an amount of the RF emission radiated from the electronic device at the first distance by scaling and subtracting output of the second RF receiver from out of the first RF receiver.

- 66. (New) The system of Claim 65, wherein the local transmission sources include non-stationary sources.
- 67. (New) The system of Claim 65, wherein the local transmission sources are operative to transmit the ambient RF signals arriving the first and second RF sensors from unknown directions.
- 68. (New) The system of Claim 65, wherein second distance is at least ten times of the first distance.
 - 69. (New) The system of Claim 65, further comprising: a first clock in electric communication with the first RF receiver; and

Application No.: 09/497,792

Response to Office Action of 11/15/2004

Attorney Docket: SARAX-007A

a second clock in electric communication with the second RF receiver.

- 70. (New) The system of Claim 65, further comprising an external RF reference signal source for synchronizing the first and second RF receivers.
- 71. (New) The system of Claim 65, wherein the signal processing system includes a computer.
- 72. (New) The system of Claim 65, wherein phase relationship between the first and second RF receivers is unknown.
- 73. (New) The system of Claim 72, further comprising a half filter length delay to retard or the phase relationship between the first and second RF receivers.
- 74. (New) A system for measuring RF emissions radiated from an electronic device, comprising:
- a first RF sensor operative to receive the RF emissions radiated from the electronic device at a specified first distance and RF ambient signals;
- a first RF receiver in electrical communication with the first sensor, the first RF receiver being operative to demodulate the first RF sensor;
- a second RF sensor located away from the electronic device by a second distance, the second distance of the second RF sensor is at least a predetermined times larger than the first distance such that the second RF sensor primarily receives the RF ambient signals;
- a second RF receiver in electrical communication with the second RF sensor, the second RF receiver being operative to demodulate output of the second sensor;
- a signal processing system in electrical communication with the first and second RF receivers, the signal processing system being operative to determine an amount of the RF emission radiated from the electronic device at the specified first distance by scaling and subtracting output of the second RF receiver from output of the first RF receiver.
- 75. (New) The system of Claim 73, wherein the first and second RF are operative to digitize the outputs of the first and second RF sensor, respectively.
- 76. (New) The system of Claim 73, wherein the ambient RF signals are generated from non-stationary local transmitters.
- 77. (New) The system of Claim 73, wherein the second distance is at least ten times of the first distance.

Application No.: 09/497,792

Response to Office Action of 11/15/2004

Attorney Docket: SARAX-007A

78. (New) The system of Claim 73, wherein the first and second RF receivers have unknown phase relationship.

- 79. (New) The system of Claim 78, further comprising a half filter length delay for phase retard or advance between the first and second RF receivers.
- 80. (New) A method of measuring RF emissions radiated from an electronic device in the environment that has a plurality of ambient RF signal sources, comprising:

using a first RF sensor to receive the RF emissions radiated from the electronic device and ambient RF radiations emitted from the ambient RF signal sources at a specified first distance;

connecting the first RF sensor to a first RF receiver to demodulate and digitize output of the first RF sensor;

using a second RF sensor at a second distance away from the electronic device to receive primarily the ambient RF radiation, the second distance being at least a predetermined times longer than the first distance;

connecting the second RF sensor to a second RF receiver to demodulate and digitize output of the second RF sensor;

connecting the first and second RF receivers to a computer; and

using the computer to scale and subtract output of the second RF receiver from output of the first RF receiver, so as to determine the RF emissions radiated from the electronic device.

- 81. (New) The method of Claim 80, further comprising a step of synchronizing the first and second RF receivers before processing outputs thereof.
- 82. (New) The method of Claim 80, further comprising selecting the second distance at which the second RF sensor receives the RF emission at a power level 20dB less than that received by the first RF sensor.
- 83. (New) The method of Claim 80, further comprising phase delaying or phase advance between the outputs of the first and second RF receivers.